

(12) UK Patent Application (19) GB (11) 2 086 720 A

(21) Application No 8034751

(22) Date of filing

24 Oct 1980

(43) Application published

19 May 1982

(51) INT CL³ A47C 16/02

(52) Domestic classification

A4L 114 119 149 ABA
BDC

(56) Documents cited

GB 1190971

US 3806118A

US 3967820A

(58) Field of search

A4J

A4L

(71) Applicant

Douglas Charles

McDonald Pike

Winthrop Hall

Chilton

Sudbury

Suffolk

(72) Inventor

Douglas Charles

McDonald Pike

(74) Agents

Sanderson & Co

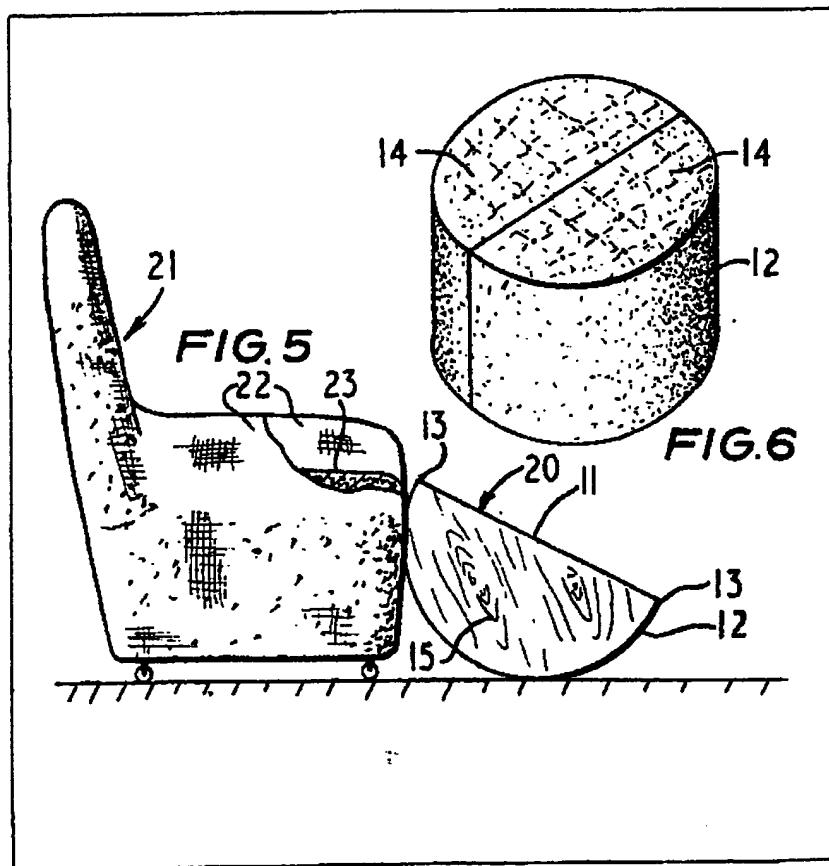
97 High Street

Colchester

Essex CO1 1TH

(54) A leg rest

(57) A leg rest for use with a chair comprises a planar rectangular surface 11 and an arcuate surface 12 extending between the two shorter edges 13 of the planar surface. Padded upholstery is provided on at least the planar surface 11. In use, the leg rest is positioned with the arcuate surface both on the ground and bearing on the front of a chair with the planar surface extending downwardly away from the chair seat: a user may then rest his calves on the planar surface. The leg rest may be used on its own, or with a similar leg rest, to provide a table (surface 15 uppermost) or a pouffe (surface 14 uppermost).



GB 2 086 720 A

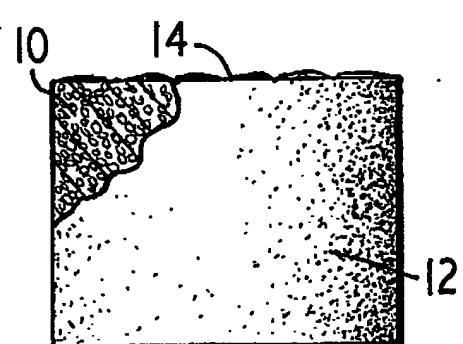


FIG. 1

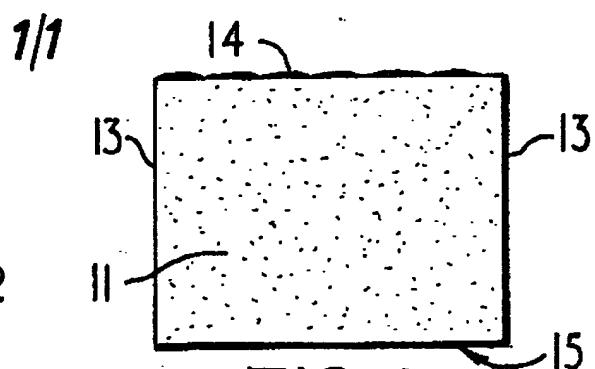


FIG. 2

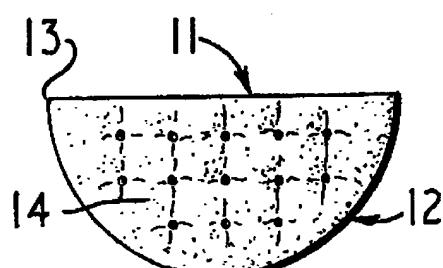


FIG. 3

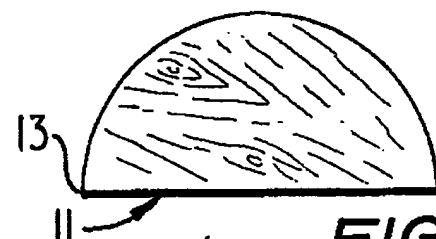


FIG. 4

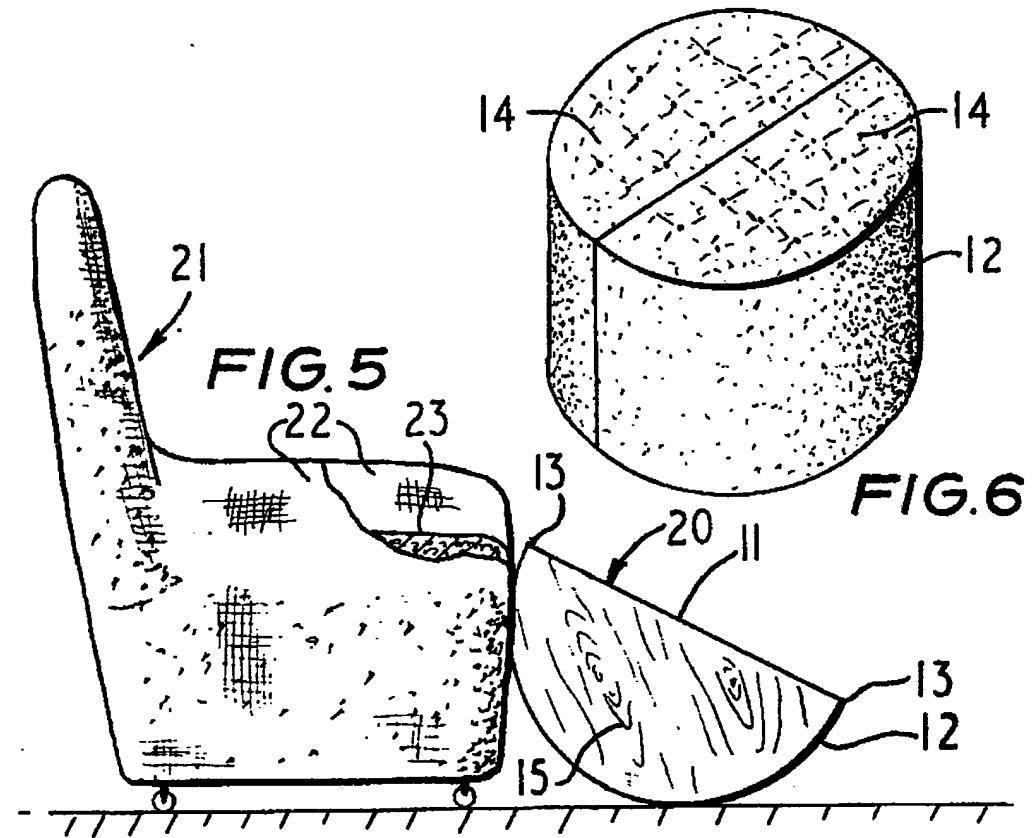


FIG. 5

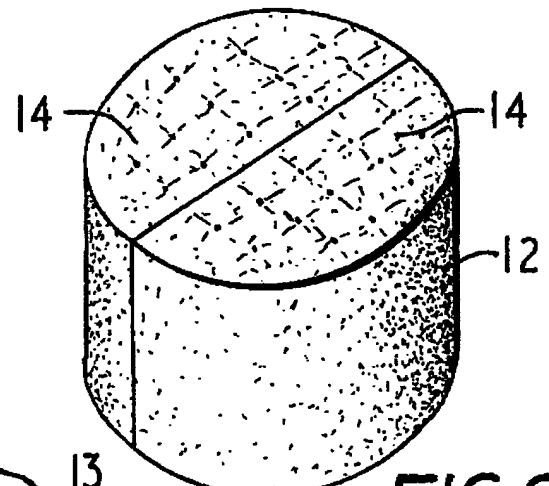
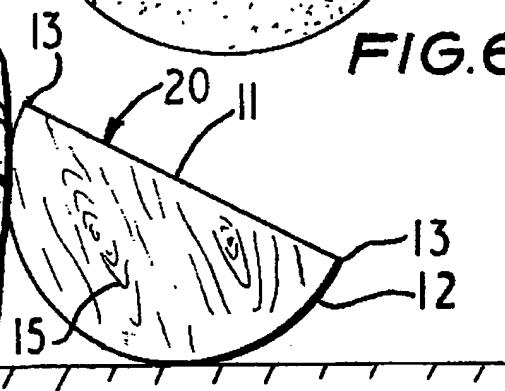


FIG. 6



SPECIFICATION

A leg rest

5 5 This invention relates to a leg rest, suitable for use with a wide variety of types, designs and styles of chair.

When a person sits in a conventional arm-chair or 'easy chair', though the greater part of the user's body is supported, the calves are not. Moreover, presuming the person seated has his feet resting on the ground, the angle at which the calves extend, with respect to the ground,

10 10 depends upon both the height of the seat of the chair and the length of the person's legs. Thus, a chair which for one person may seem reasonably comfortable, may for another not be so comfortable.

It has been recognized that the apparent comfort of a chair can be much enhanced by supporting a greater length of the legs of a user and by ensuring that the calves do not extend 15 15 at an angle close to vertical. As a result, there has been designed a great number of different types of foot-stool, all of which are intended to fulfil the above-mentioned requirements, to a greater or lesser extent. Because however a foot-stool does not ordinarily and cannot easily be adapted to support the calves of a user, there have been designed chairs which incorporate a movable platform adapted when in use to support at least the calves and maybe also the feet as 20 20 well of a user. Though it is generally agreed that such chairs can be extremely comfortable for a wide variety of persons, they are however relatively expensive in view of the mechanism which is required to support the platform at the desired angle. Moreover, the chair must specially be constructed to include the platform and an existing chair cannot easily be modified to include such an adjustable platform.

25 25 It is a general object of this invention to provide a leg rest suitable for use with an existing chair and which may serve in use to enhance the apparent comfort of the chair, by supporting at least in part the calves of a user.

According to this invention, there is provided a leg rest for use with a chair, which leg rest has a generally planar and rectangular surface and an arcuate surface extending between two 30 30 opposed edges of the generally planar surface, the curvature of the arcuate surface and the distance between said two opposed edges being such that the leg rest may be propped against the front of a chair with one of said edges adjacent or in the region of the front edge of the chair seat and with the arcuate surface resting on the ground, whereby the calves of the person seated in the chair may be rested on the planar surface, extending at an acute angle to the 35 ground.

It will be appreciated that the leg rest of this invention is of generally D-shaped longitudinal cross-section (that is, a section taken on a circumferential line of the arcuate surface) and the width of at least the planar surface of the leg rest should be sufficient to allow both calves of a user to be rested thereon. Clearly, the dimensions of the leg rest could be varied over relatively 40 40 large ranges and yet the leg rest would still be capable of being used in the manner just described, but nevertheless a preferred range of sizes is for the radius of curvature of the arcuate surface to be not less than 200 mm but not more than 400 mm, the length of the planar surface to be not less than 450 mm but not longer than 700 mm, and for the width of the planar section to be not less than 200 mm but not more than 450 mm. A leg rest satisfying the 45 45 just-mentioned preferred dimensional requirements is found to be satisfactory for use with a great number of conventionally-dimensioned chairs and, when in use, to be comfortable for use by many people.

It will also be appreciated that the arcuate surface of the leg rest of this invention allows immediate and simple adjustment of the leg rest, making it suitable for use with almost any 50 50 conventional chair, enabling one edge of the planar surface (adjoining the arcuate surface) to be disposed at or adjacent the front edge of the seat of a chair. For a chair with a relatively low seat, the planar surface will extend at a relatively shallow angle to the horizontal, whereas for a chair having a relatively high seat, the planar surface will extend at a greater angle to the horizontal—but despite these variations in seat height, the planar surface will suitably be 55 disposed to support the calves of a user.

The curvature of the arcuate surface may be constant, or may vary along the length thereof. Moreover, the arcuate surface may be curved in two directions, rather than just from one edge of the planar surface to the other opposed edge. Thus, the leg rest may have a relatively small curvature transverse to the main curvature thereof—such that the arcuate surface is somewhat 60 60 barrel-shaped—or even may have a relatively large curvature, such that the leg rest is in the form of a part of a sphere or spheroid.

It is preferred for the planar surface of the leg rest of this invention to be upholstered, in order to make the surface comfortable for supporting the legs of a user. For example, the planar surface may be provided with a soft, resilient material (such as a foamed natural or synthetic 65 65 elastomer), suitably covered with a fabric so as to present an attractive appearance to the overall

leg support.

The leg support of this invention clearly could be made in any one of many ways, but the preferred method is to form a block of expanded or foamed plastics material, so as to have a D-shaped longitudinal cross-section. The corners and edges of such a block may be reinforced, for instance by bonding thereto rigid or semi-rigid plastics material strips, and the whole leg rest then could be covered in an upholstery material. It is however preferred for the planar surface also to be covered with a resilient material, as mentioned above.

When the leg rest of this invention is not being used in the described manner, it may be employed for example as an occasional table, provided that the arcuate surface has only a single curvature or is curved only to a relatively small extent transverse to the major curvature. To this end, it is preferred for one of the D-shaped side cheeks to be faced with a rigid material, such as wood, a wood-veneer, or a plastics laminate. In this way, when the leg rest is placed with the opposite D-shaped side cheek on the ground, the faced side cheek is uppermost and horizontal, and thus may serve as a table top. Moreover, if said opposite D-shaped side cheek is covered with an upholstery material, padded if required with a resilient material, the leg rest may be placed on the ground the other way up (that is with the faced D-shaped side cheek on the ground) the leg rest may serve as a pouffe for occasional use.

It will be appreciated that by employing two leg rests as just described, a circular occasional table or circular pouffe may be formed, by placing the two leg rests together with their planar surfaces in contact.

By way of example only, one specific embodiment of leg rest constructed in accordance with this invention will now be described, reference being made to the accompanying drawing, in which:

Figure 1 is a partially cut away view on the arcuate surface of the leg rest; 25
 Figure 2 is a view on the planar surface of the leg rest; 25
 Figure 3 is a view on one side cheek of the leg rest;
 Figure 4 is a view on the opposite side cheek;
 Figure 5 shows the leg rest in use, with an easy chair; and
 Figure 6 shows two leg rests of this invention, placed together to form a pouffe.

30 The preferred embodiment of leg rest of this invention has a generally D-shaped cross-sectional shape, as shown in Figs. 3 and 4 of the drawings. The leg rest is constructed from a foamed plastics material 10, which may be suitably reinforced (not shown) in the corner regions and along the edges. The foamed plastics material either originally is formed to have the illustrated D-shaped cross-section, or may be cut from a larger block of material, so as thereby 35 to define a generally planar and rectangular surface 11, and an arcuate surface 12 adjoining the planar surface along the two shorter opposed edges 13 thereof. Two D-shaped side cheeks 14 and 15 are thus formed, each adjoining one of the long edges 16 respectively of the planar surface as well as one edge of the arcuate surface 12. A soft, resilient padding is applied to one side cheek 14 and also the the planar surface 11. The whole leg rest, except for the side cheek 40 15 opposed to that covered with the resilient material, is covered with a suitable fabric, to give the leg rest an attractive appearance. The other side cheek 15 has a wooden veneer applied thereto, as shown.

Fig. 5 shows diagrammatically the leg rest 20 in use with an easy chair 21, having arms 22 and a seat 23. As can be seen, the arcuate surface 12 rests both on the floor and against the front face 24 of the chair, such that the upper end of the planar surface is closely adjacent the seat of the chair. Thus positioned, the planar surface 11 of the leg rest is capable of supporting the calves of a user seated in the easy chair.

The preferred dimensions for the leg rest described above are:

50 radius of curvature of the arcuate surface: 280 mm; 50
 width of the rectangular surface: 300 mm;
 length of the planar surface: 560 mm.

These dimensions clearly can be changed, if required—for instance, the width of the planar 55 surface may be made greater, without in any way affecting the way in which the leg rest is used. A greater width merely gives a larger area on which a user may rest his calves.

As shown in Fig. 6, two leg rests of this invention as described above may be placed with their planar surfaces 11 together, and with the padded and upholstered side cheeks 14 uppermost. When positioned in this manner, the leg rest may form a convenient circular pouffe. 60 If the side cheek 14 of one leg rest is placed on the ground, the faced side cheek 15 is uppermost and thus may serve as an occasional table. Again, two leg rests may be placed with their planar surfaces 11 together and with their respective faced side cheeks 15 uppermost, so that the two leg rests together serve as a circular occasional table.

1. A leg rest for use with a chair, which leg rest has a generally planar and rectangular surface, and an arcuate surface extending between two opposed edges of the generally planar surface, the curvature of the arcuate surface and the distance between said two opposed edges being such that the leg rest may be propped against the front of a chair with one of said edges adjacent or in the region of the front edge of the chair seat and with the arcuate surface resting on the ground, whereby the calves of the person seated in the chair may be rested on the planar surface which extends at an acute angle to the ground. 5
2. A leg rest according to Claim 1, wherein the radius of curvature of the arcuate surface is not less than 200 mm but not more than 400 mm.
3. A leg rest according to Claim 1 or Claim 2, wherein the length of the planar surface is not less than 450 mm but not longer than 700 mm. 10
4. A leg rest according to any of the preceding Claims, wherein the width of the planar surface is not less than 200 mm but not more than 450 mm.
5. A leg rest according to any of the preceding Claims, wherein the curvature of the arcuate surface is constant over the entire length thereof. 15
6. A leg rest according to any of the preceding Claims, wherein the arcuate surface is curved in two directions, mutually at right angles.
7. A leg rest according to any of the preceding Claims, wherein the planar surface of the leg rest is upholstered.
8. A leg rest according to any of the preceding Claims, wherein the leg rest comprises a block of expanded or foamed plastics material formed so as to have a D-shaped longitudinal cross-section, the corners and edges of the block being reinforced, and the reinforced block being covered in an upholstery material. 20
9. A leg rest according to Claim 8, wherein one of the D-shaped side cheeks is faced with a rigid material. 25
10. A leg rest according to Claim 9, wherein the other D-shaped side cheek is upholstered.
11. A leg rest substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

Printed for Her Majesty's Stationery Office by Burgess & Son (Abingdon) Ltd.—1982.
Published at The Patent Office, 25 Southampton Buildings, London, WC2A 1AY, from which copies may be obtained.